1859MNRAS..19..199.

The following table affords a view of the definitive results derived from the two hypotheses:—

Quantities.	Elliptic.	Non-Elliptic.	Diff.
a	20,926,348 ± 186	20,927,197 ± 385	849
b	20,855,233 ± 239	20,855,493 ± 237	260
$\frac{1}{2}\cdot\frac{a+b}{a-b}$	293·76 ± 1·06	291·36 ± 1·39	2·40
Degree	364,613·33 ± 3·00	364,624·57 ± 5·36	11·24

Combining Colonel Everest's Indian arc from Daumergida to Kaliana with the English arc from St. Agnes to Saxavord, the value of the mean degree is found to be 364,623·50 ± 7·15 and $a : b$ = 292·39 : 291·39; probable error ± 2·67.

Combining the same Indian arc with the Russian arc, the value of the mean degree is found to be = 364,616·07 ± 6·59 and $a : b$ = 294·58 : 293·58; probable error ± 2·27.

The three arcs combined together give 364,619·19 ± 6·14 for the value of the mean degree, and $a : b$ = 294·44 : 293·44; probable error ± 2·26.

The foregoing determinations conclude with this remark:—

"Until the exact latitudes of the thirteen stations in the Russian arc are known we cannot state the precise elements best representing all the geodetical operations. They cannot, however, be far from the following:—

Mean Degree of Meridian	364,616 feet of Ordnance Standard
Ratio of Semi-Axes	293 : 294."

The work concludes with some remarks upon the Indian arc.

Errata in the Art. Physical Astronomy (Encyclopædia Metropolitana) communicated by Captain Tennant.

Page 671, in equation (87), read

$$\tan ☊ = \frac{\sin l'' \tan b - \sin l \tan b''}{\cos l'' \tan b - \cos l \tan b''}$$

And in equation (90) of the same page,

$$\varphi = \frac{\theta'' - \theta}{2}.$$

To be disposed of, an Iron Equatoreal Stand adapted for carrying a refractor of from 3 to 4 inches aperture. May be seen at the rooms of the Society.

Downloaded from http://mnras.oxfordjournals.org/ at McMaster University Library on July 2, 2015

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System

1859MNRAS..19..199.

ERRATA.

Page 28, line 18 from bottom, *for* Lieut. Chinmo, *read* Lieut. W. Chimmo.
— 79, — 10–12, 18–20, the numbers here stated refer to seconds of arc.
— —, — 23, *for* uninterruptedly, *read* interruptedly.
— 86, — 20, *for* 11 A.M. *read* 11 P.M.

CONTENTS.

Page
Fellows elected 169
The late Director of the Radcliffe Observatory .. .. ib.
On the Silvering of Glass Specula, by Mr. De La Rue and Dr. Müller 171
Observations of Small Planets, made at the Royal Observatory, Greenwich 172
Extract of a Letter from Dr. C. H. F. Peters, of Hamilton College (U.S.), to Mr. Carrington 173
On the Movement of the Solar System in Space, by the Astronomer Royal 175
Note on the Development of the Disturbing Function in the Lunar Theory, by Sir John Lubbock, Bart. 180
Note on a Group of Solar Spots observed on the 23d of February, 1859, by Mr. Birt 181
On some Indications of Rotation in a Solar Spot, by Mr. Birt ... 182
Note on *Saturn's* Ring, by the Rev. W. R. Dawes 184
Observations of Donati's Comet taken at Mussooree in India, by Capt. Tennant, R.E. 185
Note from the Astronomer Royal to the Editor on the Approaching Conjunction of *Venus* and *Jupiter* 186
Description of an Improvement in the making of large Reflecting Telescopes with Silvered Glass Specula, by M. Leon Foucault ... ib.
Miscellaneous Intelligence:—
  Death of Dr. Wichmann 190
  Report of the Committee of Overseers of Harvard University (U.S.) ib.
Recent Publications:—
  Report on the Recent Progress of Theoretical Dynamics, by Mr. Cayley 193
  Account of the Principal Triangulation of the British Isles, edited by Captain Clarke, R.E. 194
Errata 199

London:—Printed by G. Barclay, Castle St. Leicester Sq. and Published at the Apartments of the Society, April 6, 1859.

Downloaded from http://mnras.oxfordjournals.org/ at McMaster University Library on July 2, 2015

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System